

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FL	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/649,076	10/649,076 08/27/2003		Frederick A. Perner	200208197-1	4661	
22879	7590	12/23/2004	EXAMINER			
		RD COMPANY 4 E. HARMONY RO	PHAN, T	PHAN, TRONG Q		
		OPERTY ADMINIS	ART UNIT	PAPER NUMBER		
FORT COL	LINS, CO	80527-2400	2818			

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/649,076	PERNER ET AL.				
Office Action Summary	Examiner	Art Unit				
	TRONG PHAN	2818				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 27 Au	<u>igust 2003</u> .					
2a) ☐ This action is FINAL. 2b) ☒ This						
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	•					
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1204.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood how the magnetic memory elements 222 and 223 can perform properly the read/write operation when the read conductors and the write conductors are electrically connected together without having any isolating layer in between.

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The common conductors are not readable on the respective drawings of the present invention. Applicant is requested to point out which element in the drawings of

Art Unit: 2818

the present invention to be read on the claimed common conductors in order to help the examiner to understand the claimed subject matter of the invention.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-20 are, insofar as understood, rejected under 35 U.S.C. 103(a) as being unpatentable over Broyles et al., 6,356,965, in view of Reohr et al., 6,404,671.

What is not shown in Fig. 1 of Broyles et al., 6,356,965, is the memory means for storing information.

Reohr et al., 6,404,671, discloses in Fig. 1A a magnetic memory device comprising:

first magnetic memory elements 112 and 114;

first group of conductors 106, 108 and 110;

second magnetic memory elements 116 and 118;

second group of conductors 120 and 122;

common group of conductors 100, 102 and 104.

It would have been obvious under 35 USC 103(a) to one of ordinary skill in the art at the time of the invention was made to utilize the magnetic memory device in Fig. 1A of Reohr et al., 6,404,671, for the memory 104 in Fig. 1 of Broyles et al., 6,356,965,

Application/Control Number: 10/649,076 Page 4

Art Unit: 2818

for the purpose of providing an improved write margin (see last four lines of column 3 of Reohr et al., 6,404,671).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Heinrich et al., 6,199,167, Wunderlich et al., 6,065,122, Hidaka, 6,788,568, Deschepper et al., 6,145,029, Schuster-Woldan et al., 6,462,980, Ramcke et al., 6,490,190, Nakajima et al., 6,473,336, Crisan, 6,292,890, Tran et al., 6,801,451, Sharma et al., 6,693,825.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG PHAN whose telephone number is (571) 272-1794. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRONG PHAN
PRIMARY EXAMINER